APPENDIX K

REGULATORY FRAMEWORK

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REGULATORY FRAMEWORK

The regulatory framework that applies to the proposed project includes the federal, state, and locally adopted laws, regulations, plans, and policies whose requirements govern the review and approval of the project by responsible agencies, as well as the construction and operation of the project. Relevant federal and state requirements are discussed briefly below, while local requirements are addressed in Chapter 5 of the EIR.

K.1 FEDERAL REQUIREMENTS

K.1.1 Clean Water Act as Amended (33 USC § 1251 *et seq.*)

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Specific sections of the Act control the discharge of pollutants and wastes into aquatic and marine environments.

The major section of the CWA that applies to the proposed project is Section 404, which requires a permit from the U.S. Army Corps of Engineers (USACE) for the discharge of dredged or fill material in Waters of the U.S., including offshore waters as well as onshore streams and wetlands. For projects affecting navigable waters, the USACE generally combines Section 404 requirements with those of Section 10 of the Rivers and Harbors Act.

Section 404 Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230) have been developed by the Administrator of the Environmental Protection Agency in conjunction with the Secretary of the Army acting through the Chief of Engineers. Section 404(b)(1) of the CWA establishes guidelines for the discharge of dredged or fill material into the aquatic ecosystem. EPA's Section 404(b)(1) Guidelines (40 CFR, Section 230.1[c]) state the following:

> "Fundamental to these Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge would not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern."

Closely related to Section 404 is Section 401, which requires certification that the permitted project complies with the state water quality standards for actions within state waters. Under Section 301, states must establish water quality standards for all state waters. Erosion-induced siltation or fuel spills can cause the total dissolved solids or chemical concentrations in the water column to exceed state standards. To receive state certification, an applicant pursuing a permit must demonstrate that these standards would not be exceeded. Section 401 certification is usually completed in conjunction with the USACE's Section 404 permit.

K.1.2 Clean Air Act as Amended (42 USC § 7401 *et seq.*)

Air quality regulations were first promulgated with the Federal Clean Air Act of 1969 (CAA). This act established the national ambient air quality standards (NAAQS) and delegated the enforcement

of air pollution control regulations to the states. In California, the California Air Resources Board (ARB) is responsible for enforcing air pollution regulations. The ARB has in turn delegated the responsibility of regulating stationary emission sources to local air agencies. In areas that exceed the NAAQS, the CAA requires preparation of a State Implementation Plan (SIP), detailing how the state will attain the standards within mandated time frames. The Clean Air Act Amendments of 1990 (1990 CAA) revised the attainment planning process. The 1990 CAA identifies new emission reduction goals and compliance dates based upon the severity of the ambient air quality standard violation within a region.

K.1.3 Marine Mammal Protection Act (16 USC § 1361 *et seq*)

The Marine Mammal Protection Act protects marine mammals from harm or harassment except as permitted by the National Marine Fisheries Service.

K.1.4 Coastal Zone Management Act (16 USC § 1456 *et seq.*)

The Coastal Zone Management Act (CZMA) established national policy to preserve, protect, develop, and, where possible, restore or enhance the resources of the nation's coastal zone. Under the CZMA, any federal agency conducting or supporting activities directly affecting the coastal zone must proceed in a manner consistent with approved state coastal zone management programs, to the maximum extent practicable. If a proposed activity affects water use in the coastal zone (i.e., the territorial sea and inland), the federal agency must demonstrate that the activity is consistent with the state's coastal zone management program to the maximum extent practicable.

The California Coastal Commission (CCC) and all the local coastal jurisdictions that the cable passes through that have an approved coastal management plan would be the implementing agencies for the CZMA.

The programs applicable to the project are the California Coastal Zone Management Plan and affected local jurisdictions' approved coastal management plans.

The Coastal Zone Reauthorization Amendments of 1990 (Public Law No. 101-508 Section 6208) state that any federal activity, regardless of its location, is subject to the CZMA consistency requirement if it would affect any natural resources, land uses, or water uses in the coastal zone. No federal agency activities are categorically exempt from this requirement.

K.1.5 Endangered Species Act (16 USC § 1531 *et seq.*)

The Endangered Species Act protects threatened and endangered species from unauthorized taking, and requires federal agencies to avoid actions that would jeopardize the continued existence of such species or that would result in the destruction or adverse modification of any critical habitat of such species. Section 7 of the Act requires that federal agencies consult with the USFWS and/or NMFS prior to approving an action that may affect a listed species. Section 10 of the Act requires a permit from the USFWS for any action that would involve the "taking" i.e., harm or harassment of a listed species.

K.1.6 National Historic Preservation Act (16 USC § 470 *et seq.*)

The National Historic Preservation Act (NHPA) established the National Register of Historic Places (National Register), which is a catalog of properties including sites, districts, buildings, structures, and objects considered significant for their historic, architectural, engineering, archaeological, or cultural value. Properties of local, state, or national significance may be eligible for inclusion in the National Register. Under the statute, federal agencies are required to consider the effects of a proposed action on properties listed or determined eligible for listing in the National Register. This is accomplished through coordination between the federal agency and the State Historic Preservation Office (SHPO), leading to a plan that either avoids damaging any National Register property or satisfactorily mitigates adverse effects caused by a proposed action.

The Act authorizes the Secretary of the Interior to expand and maintain a National Register of Historic Places (NRHP) and established procedures for the nomination of properties to the NRHP. Procedures for the nomination of properties to the NRHP are found in 36 CFR Part 60.

The identification and evaluation of cultural resources by a federal agency with jurisdiction over a federal, federally assisted, or federally licensed project is required by the NHPA to ensure their consideration during project planning. The regulations implementing Section 106 of the NHPA (36 CFR Part 800) require a determination of significance using the criteria of the National Register of Historic Places (NRHP) (36 CFR Part 60.4) and require affording the Advisory Council on Historic Preservation an opportunity to comment on actions that may indirectly or directly affect resources on or eligible for listing on the NRHP.

The NRHP is a listing of a wide range of historic property types reflecting the diversity of the nation's history and culture. Generally, a project that will have a "substantial adverse change" on a NRHP property or a NRHP-eligible property is regarded as having a significant adverse effect on the environment. A resource is considered eligible for NRHP listing if it exhibits the following:

1. Is at least 50 years, unless of exceptional historical significance;

2. Retains integrity of location, design, setting, materials, workmanship, feeling, and association; and

3. Has one of the following characteristics:

    A) Is associated with events that have made a significant contribution to the broad patterns of our history;

    B) Is associated with the lives of persons significant in our past;

    C) Embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or

    D) Has yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

Other federal legislation includes but is not limited to the American Indian Religious Freedom Act (AIRFA), the Native American Graves Protection and Repatriation Act (NAGPRA), and the Abandoned Shipwreck Act (ASA). AIRFA requires federal agencies to allow access to federal lands and objects used in the practice of traditional Native American religious ceremonies. Title 36 CFR Part 900 addresses the consideration of Native Americans and other interested parties in the process of evaluating impacts on cultural resources. Any action that could directly or indirectly affect properties including archaeological sites, biological habitats, or topographic features associated with Native American religious practices would be considered significant. NAGPRA addresses issues related to discovery of Native American human remains, funerary objects, sacred objects or objects of cultural patrimony. The ASA indicates that shipwrecks in federal waters belong to the U.S. government, while shipwrecks within California waters belong to the state.

K.1.7 Submerged Lands Act (Public Law 82-3167; 43 USC § 1301 *et seq.*)

This Act, which was passed by Congress in 1953, authorized coastal states to extend their state boundaries seaward to include "lands beneath navigable waters" to a distance of 3 miles offshore from the low tide line. Under this Act, the federal government relinquished all of its rights to lands beneath navigable waters within the 3-mile limit, and the respective states were granted ownership of all resources within these lands and waters. The federal government retained its rights and powers regarding regulation of these lands and waters for the constitutional purposes of commerce, navigation, national defense, and international affairs. As a result of this Act, that portion of the continental shelf beyond the 3-mile limit became known as the outer continental shelf (OCS). The OCS lands remain under the ownership and control of the federal government. This Act covers the portion of the sea cable that would lie between 0 and 3 miles offshore the coast.

K.1.8 Migratory Bird Treaty Act (16 USC § 703 *et seq.*)

This Act protects migratory birds by limiting the hunting, capturing, selling, purchasing, transporting, importing, exporting, killing, or possession of these birds or their nests or eggs. The specific migratory birds covered are identified in separate agreements between the United States and Great Britain, Mexico, and Japan.

K.2 STATE OF CALIFORNIA REQUIREMENTS

K.2.1 California Environmental Quality Act (Public Resources Code Section 21000 *et seq.*)

CEQA establishes requirements for consideration of environmental impacts, and for preparation of an Environmental Impact Report (EIR) prior to implementation of applicable projects. CEQA requires that significant environmental impacts be mitigated to a level of insignificance, or to the maximum extent feasible. If full mitigation is not feasible, the state lead agency must make a finding of overriding considerations before approving the project. This document fulfills the CEQA EIR requirement.

The California State Lands Commission is the lead agency under CEQA for this EIR. Responsible agencies (public agencies other than the lead agency that have responsibility for carrying out or approving a project) include the following partial list:

- The U.S. Army Corps of Engineers,
- U.S. Fish and Wildlife Service,

- U.S. National Marine Fisheries Service,
- The federal marine sanctuaries offshore California,
- California Coastal Commission,
- California Department of Fish and Game,
- The Regional Water Quality Control Boards (RWQCBs),
- County and city planning departments, and
- Local air pollution control districts.

See Table 2.10-1 in Chapter 2 of this EIR for a comprehensive list of agencies expected to issue decisions or approvals for the project.

K.2.2 California Coastal Act (Public Resources Code Section 3000 *et. seq.)*

The goals of the Coastal Act are to maintain, enhance and restore the quality of the coastal zone environment; assure balanced utilization and conservation of coastal zone resources; maximize access and recreation along the coast consistent with sound conservation principles and private property rights; assure priority of coastal-dependent and coastal-related development over other development of the coast; and encourage state and local cooperation in planning and implementing mutually beneficial uses in the coastal zone. The Act establishes coastal zone boundaries and policies governing the coastal zone; it provides for the local implementation of the Act through local coastal programs; and it establishes the Coastal Commission, which provides consistency review of projects in federal waters and oversees the local permitting of projects within the coastal zone.

K.2.3 California Clean Air Act (Health & Safety Code 40918-40920)

The California Clean Air Act of 1988, as amended in 1992 (CCAA), outlines a program to attain the CAAQS for O_3, NO_2, SO_2, and CO by the earliest practical date. Since the CAAQS are more stringent than the NAAQS, emissions reductions beyond what would be required to show attainment for the NAAQS will be needed. Consequently, the main focus of attainment planning in California has shifted from the federal to state requirements. Similar to the federal system, the state requirements and compliance dates are based upon the severity of the ambient air quality standard violation within a region.

K.2.4 California Wetlands Conservation Policy (California Executive Order W-59-93)

This state policy recognizes the value of marshlands and other wetlands. The policy is that there be: (1) no net loss of wetland acreage; and (2) a long-term gain in the quantity, quality, and permanence of wetland acreages and values in California. This policy is to be implemented in a manner that fosters creativity, stewardship, and respect for private property. The California Resources Agency and its various departments do not authorize or approve projects that fill or otherwise harm or destroy coastal, estuarine, or inland wetlands. Exceptions may be granted if all the following conditions are met: (a) the project is water-dependent; (b) no other feasible alternative is available; (c) the public trust is not adversely affected; and (d) adequate compensation is proposed as part of the project. The CDFG and Fish and Game Commission policy stresses the need to compensate for the loss of wetland habitat on an acre-for-acre basis.

Compensation for the loss of wetland habitat values to fish and wildlife resources requires the creation of habitat values at the compensation site that at least duplicate those habitat values that

are lost due to project implementation. Mitigation for lost habitat values may be accomplished in one of four ways (listed from most acceptable to least acceptable): in-kind, on-site; in-kind, off-site; out-of-kind, on-site; and out-of-kind, off-site.

K.2.5 Porter-Cologne Water Quality Control Act (California Water Code Sec. 13000 *et seq.*; CCR Title 23, Chapter 3, Subchapter 15)

The Porter-Cologne Water Quality Control Act is the primary state regulation that addresses water quality. The requirements of the Act are implemented by the State Water Resources Control Board (SWRCB) at the state level and, at the local level, by the Regional Water Quality Control Boards (RWQCBs). Under the direction of the SWRCB, the RWQCBs carry out planning, permitting, and enforcement activities related to water quality in California. The Act provides for waste discharge requirements and a permitting system for discharges to land or water. NPDES permits are administered by the RWQCB. The Act also provides for Basin plans to identify beneficial uses of water resources and to implement appropriate controls The Basin Plan establishes beneficial water uses and water quality objectives needed to protect those beneficial water uses. Basin Plans applicable to the proposed project include those prepared for the San Francisco Basin (Region 2), the San Luis Obispo Region (Region 3), the Los Angeles Region (Region 4), and the San Diego Region (Region 9).

The SWRCB, as authorized by the Porter-Cologne Act, has promulgated regulations designed to protect water quality from the effects of waste discharges to land. These regulations are popularly known as "Subchapter 15" because they appear as Subchapter 15 of Title 23 of the California Code of Regulations. Under Subchapter 15, wastes must be controlled to prevent direct or indirect discharge of wastes (e.g., siltation, petroleum spills) to waters of the state.

K.2.6 State Lands Commission Policies

The SLC is responsible for administration of state public trust lands in coastal waters (within a 3-mile territorial limit) and other tidal and submerged areas. The state's interest in these lands consists of sovereign fee ownership, or a Public Trust easement implicitly retained by the state over sovereign lands sold into private ownership. Use of these lands (e.g., for installation of the sea cable) requires written authorization from the SLC. The SLC reviews projects for compliance with CEQA. In some cases, the state legislature has granted, by statute, administration of the state's interests in filled and unfilled tidelands and submerged lands to local agencies. In these cases, SLC retains an oversight role. A major portion of the proposed dredging and aquatic reuse/disposal sites with the Port Area would be subject to SLC permit requirements, so coordination with the SLC would be necessary.

K.2.7 California Endangered Species Act (Fish and Game Code Section 2050 *et seq.*)

The California Endangered Species Act (CESA) provides for the recognition and protection of rare, threatened, and endangered species of plants and animals. The Act requires state agencies to consult with the CDFG to ensure that state-authorized or funded actions do not jeopardize the continued existence of a listed species. The Act prohibits the taking (collection, killing, or injury, whether intentional or accidental) of listed species without authorization from the CDFG. CDFG may authorize the taking of a listed species through a Memorandum of Understanding that establishes the extent of take permitted by CDFG and sets forth the required mitigation.

K.2.8 Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

The Safe Drinking Water and Toxic Enforcement Act was approved by California voters as Proposition 65 in November 1986. Its purpose is to prohibit the discharge, into sources of drinking water, of chemicals that have been listed by the Governor as causing cancer or reproductive toxicity. Twelve months after the listing of a chemical by the Governor and the Scientific Advisory Panel appointed by the Governor, that chemical can still be discharged only if those people who may be exposed have been notified. However, Proposition 65 may not apply to a discharge that does not contribute a "significant concentration" of a chemical, according to a concentration level that is determined by the Health and Welfare Agency. The agency has issued No-Significant-Risk Levels (NSRLs) for numerous chemicals, below which there is no assumed significant risk of cancer or reproductive toxicity. NSRLs are regulatory limits in micrograms/day that assume a daily exposure to the chemical. Quantitative risk assessments, which evaluate all potential pathways and assume lifetime exposures, are used to determine the level of exposure to a chemical.

K.3 LOCAL AIR QUALITY REGULATIONS

The project would make landfill and traverse six counties in California. Regional air pollution control districts regulate air pollution within each of these counties, including the following:

1. Bay Area Air Quality Management District,
2. Monterey Bay Unified Air Pollution Control District,
3. San Luis Obispo County Air Pollution Control District,
4. Santa Barbara County Air Pollution Control District,
5. South Coast Air Quality Management District, and
6. San Diego County Air Pollution Control District.

Since each air basin that encompasses the project does not attain state and/or national ambient air quality standards, the jurisdictional air agency has developed air quality attainment plans designed to reduce emissions to a level that will bring each region into attainment of the standards. Plans intended to attain the NAAQS are incorporated into the California SIP. Each air agency has also developed rules to regulate stationary sources of air pollution within their jurisdiction (section 3.1 discusses the air regulations that apply to the project).

A determination of project consistency with each attainment plan is required to evaluate if the proposed action would interfere with the attainment strategies outlined in these documents. A proposed action generally would be consistent with the intent of a plan if project emissions are included in the future emission inventories of the plan.

K.4 OTHER WATER QUALITY REGULATIONS

K.4.1 State and Regional Water Quality Control Plans

Under provisions of the state Porter-Cologne Water Quality Control Act and the federal Clean Water Act, the San Francisco Bay Regional Water Quality Control Board (RWQCB) (Region 2), San Luis Obispo RWQCB (Region 3), the Los Angeles RWQCB (Region 4), and San Diego RWQCB (Region 9) (as regional offices of the State Water Resource Control Board [SWRCB]), regulate water quality in these respective regions. The regional boards are authorized to monitor surface and groundwater quality and to require permits for the discharge of wastewater to all navigable waters.

The SWRCB prepares state-wide and multi-regional water quality control plans. Each Regional Board also prepares at Water Quality Control Plan (Basin Plan) for the area in their jurisdiction. The purpose of these plans is to establish water quality control measures that contribute to the protection of beneficial uses in each area. A plan consists of: (1) beneficial uses to be protected, (2) water quality objectives for the reasonable protection of beneficial uses, and (3) an implementation program for achieving the water quality objectives. The water quality objectives and the beneficial uses constitute the water quality standards required to comply with the federal Clean Water Act. These plans and policies establish water quality standards and requirements for parameters such as toxic chemicals, bacterial contamination, and other factors that have the potential to impair beneficial uses or cause a nuisance.

The California SWRCB adopted in April 1991 two water quality control plans: the Inland Surface Water plan (ISWP) and the Enclosed Bays and Estuaries Plan (EBEP). These two statewide plans included numeric water quality criteria for priority toxic pollutants. However, these plans were rescinded when a lawsuit brought by several dischargers successfully challenged how the plans were adopted. Since 1994, California has been without water quality standards for most priority pollutants for inland surface waters, enclosed bays and estuaries as required by Section 303(c)(2)(B) of the CWA. Consequently, the 1986 standards became the operating standards, which were reissued with modifications in 1995.

Since then, the EPA has proposed water quality criteria for priority toxic pollutants for California inland surface waters, enclosed bays, and estuaries. The federal promulgated criteria, when finalized, together with state-adopted designated uses, will create water quality standards for California waters. That rule will satisfy the CWA requirements and fill the need for water quality standards for priority toxic pollutants to protect public health and the environment. U.S. EPA and the State of California are working to restore standards to California waters; EPA is now proposing water quality criteria known as the California Toxics Rule and the state will be proposing implementation procedures to ensure that the resulting water quality standards will be appropriately and consistently applied throughout the State (EPA 1997).

K.4.2 EPA Ambient Water Quality Criteria

Water Quality Criteria (WQC) were developed by EPA to protect approximately 95 percent of the organisms in the aquatic environment based upon acute, chronic, and bioaccumulative testing to species at different trophic levels (EPA 1986). The criteria were developed from comprehensive species-specific acute, chronic, and bioaccumulation databases. These databases were derived from laboratory studies primarily with estuarine species and single contaminants. WQC do not address multiple contaminant interactions, the form of the contaminant, or the potential sensitivity differences between estuarine and oceanic species. Criteria are used as toxicological estimates for aquatic chemical concentrations that are protective of marine life. These criteria are listed in Table K.4-1. California has proposed adopting EPA water quality criteria as state standards. This adoption action is not yet complete.

K.4.3 Drinking Water Standards

Drinking water standards are established by both state and federal agencies. Based on guidelines developed by the EPA and California Department of Toxic Substances, primary and secondary drinking water standards are established that must be met by public water systems. Federal standards are established pursuant to the Public Health Service Act, as amended by the Safe

Drinking Water Act and other federal regulations relating to public water systems. As defined by the federal regulations (40 CFR 141):

> The "maximum contaminant level" (MCL) means the maximum permissible level of a contaminant in water that is delivered to the free flowing outlets of the ultimate user of a public water system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system.

Under the National Interim Primary Drinking Water Regulations promulgated by EPA (40 CFR parts 141 and 143), MCLs have been developed for a number of microbiological, inorganic chemical, organic chemical, and radionuclide contaminants. State MCLs are listed in Table K.4-2. The state MCLs are detailed in Title 22 CCR Chapter 15, Article 4.

In addition to the MCLs, water quality objectives for domestic or municipal supplies are designated in the RWQCB Basin Plans. Such waters must not contain concentrations of chemicals in exceedance of those specified in Title 22 CAC, Chapter 15, Article 4.

Table K.4-1. Federal EPA Ambient Water Quality Standards and Criteria (µg/L)

	Freshwater		Marine	
Parameter	*Chronic*	*Acute*	*Chronic*	*Acute*
Antimony	1,600 [1]	9,000 [2]	—	—
Arsenic	190 [1]	360 [2]	36 [1]	69 [2]
Barium	—	—	—	—
Beryllium	—	5.3 [9]	130 [9]	—
Cadmium	1.1 [1]	3.9 [2]	9.3 [1]	43 [2]
Chromium (total)	210 [1]	1,700 [2]	—	—
Chromium VI	11 [1]	16 [2]	50 [1]	1,100 [2]
Copper	12 [1]	18 [2]	—	2.9 [2]
Lead	3.2 [1]	82 [2]	5.6 [1]	140 [2]
Mercury	0.012 [1]	2.4 [2]	0.025 [1]	2.1 [2]
Nickel	158 [3]	1,418 [4]	8.3 [3]	75 [4]
Selenium	—	5 [3,8]	71 [4,8]	290 [8]
Silver	—	4.1 [4]	—	—
Thallium	—	40 [9]	1,400 [9]	213 [9]
Tributyltin	—	26 [6]	—	10 [6]
Zinc	110 [1]	120 [2]	86 [1]	95 [2]
Aluminum	87 [1]	750 [2]	—	—
Iron	—	1,000 [4]	—	—
Manganese	—	—	—	—
Ammonia as N	Ratio [5]	Ratio [6]	—	—
Alkalinity as $CaCO_3$	—	20,000 [7]	—	—
Cyanide	5.2 [1]	22 [2]	—	1.0 [2]
Sulfide-Hydrogen Sulfide	2.0	—	2.0	—
Total Dissolved Solids	—	—	—	—
Chloride	—	—	—	—
Fluoride	—	—	—	—
Nitrate	—	—	—	—
Nitrite	—	—	—	—
Sulfate	—	—	—	—
Specific Conductivity	—	—	—	—
PAHs	—	300 [9]	—	—
Carbon Tetrachloride	—	35,000 [9]	—	50,000 [9]
p-Dichlorobenzene	763 [9]	1,120 [9]	—	1,970 [9]
1,2-Dichloroethane	20,000 [9]	118,000 [9]	—	113,000 [9]
1,1-Dichloroethylene	—	11,600 [9]	—	224,000 [9]
2,4-D	365 [9]	2,020 [9]	—	—
2,4,5-TP	—	—	—	—
Endrin	0.0023 [9]	0.18 [9]	0.0023 [9]	0.037 [9]
Lindane	—	—	—	—
Methoxychlor	0.03 [9]	—	—	0.03 [9]
Toxaphene	0.0002 [9]	0.73 [9]	0.0002 [9]	0.21 [9]
1,1,1-Trichloroethane	—	—	—	31,200 [9]
Trichloroethylene	21,900 [9]	45,000 [9]	—	2,000 [9]
Total, THMs	—	—	—	—
Vinyl Chloride	—	—	—	—

Notes: MCL = maximum contaminant level

1. 4-day average chronic
2. 1-hour average acute
3. 24-hour average
4. Instantaneous maximum
5. See formula for chronic standards in EPA Quality Criteria for Water, EPA 440/5-86-001
6. See formula for acute standards in EPA 440/5-86-001
7. 20 mg/L or more for freshwater aquatic life except where natural concentrations are less
8. Federal Register, Volume 62. No. 150. August 5, 1997
9. Insufficient data to develop criteria; value presented is the LOEL (lowest observed effect level)

Table K.4-2. Selected Water Quality Standards (µg/L)

	SF-RWQCB Basin Plan Objectives		Drinking Water	
Parameter	*Marine*	*Municipal Supply Waters*	*Primary MCL*	*Secondary MCL*
Arsenic	36 [1]; 69 [2]	50	50	—
Barium	—	1,000	1,000	—
Beryllium	—	—	—	—
Cadmium	9.3 [1]; 43 [2]	5	10	—
Chromium (total)	—	50	50	—
Chromium VI	50 [1]; 1,100 [2]	—	—	—
Copper	4.9 [2]	1,000	—	—
Lead	5.6 [1]; 140 [2]	50	50	—
Mercury	0.025 [1]; 2.1 [2]	2	2	—
Nickel	7.1 [3]; 140 [4]	100	—	—
Selenium	—	50	10	—
Silver	2.3 [4]	50	50	—
Tributyltin	0.005 [5]	—	—	—
Zinc	58 [3]; 170 [4]	5,000	—	—
Aluminum	—	1,000	—	1,000
Iron	—	300	—	—
Manganese	—	50	—	—
Cyanide	5.0 [2]	200	—	—
TDS	—	500,000	—	—
Chloride	—	250,000	—	—
Fluoride	—	800-1,700	1,400-2,400 td	—
Nitrate	—	—	45,000 (as NO_3)	—
pH (unitless)	—	6.5	—	—
EC (mmho/cm)	—	0.9	—	—
Total PAHs	15 [3]	—	—	—

Notes: 1. = 4-day average
2. = 1-hour average
3. = 24-hour average
4. = instantaneous maximum
5. = 30-day average
td = temperature-dependent value
MCL = maximum contaminant level